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Kentucky Universities – Catalysts for Medical Technology Transfer

The University of Kentucky's (UK) Office for Commercialization & Economic Development was created to develop university-based technologies and invest in technology-based businesses and startups. For a complete list of University of Kentucky-affiliated companies go to www.econdev.uky.edu/companies.html. For more on UK's research enterprise, UK research centers, institutes, etc. see: www.research.ukv.edu.

Advanced Science and Technology Commercialization Center (ASTeCC) at the University of Kentucky www.econdev.uky.edu/astecc about.html

ASTeCC is the University of Kentucky's showplace for multidisciplinary research, technology transfer, and new business startups. ASTeCC is a combination faculty research facility and commercialization center. Faculty with labs in ASTeCC represent colleges throughout the university, and faculty all across campus use ASTeCC as a hub for tech-transfer activities. ASTeCC also houses a number of shared research and support resources for the entire UK community.

Contact: Tanya Floyd - tfloy2@uky.edu, A152 ASTeCC Building, University of Kentucky, Lexington, KY 40506-0286 859.218.6563 Fax: 859.257.2489 astecc@uky.edu.



Coldstream Laboratories,Inc. www.research.uky.edu/coldstream/facilities_cpst.html

Coldstream Laboratories, Inc. (CLI) turns pharmaceutical development ideas into safe, pure and effective pharmaceutical dosage forms. CLI offers full-service pharmaceutical development services including analytical, microbiology and formulation development.

Contact: Joe W. Wyse, Ph.D., President & CEO, 1500 Bull Lea Rd., Suite 250, Lexington, KY 40511 859.257.600 Toll Free: 888.588.2778 jwyse@coldstreamlabs.com



University of Kentucky Center of Membrane Sciences www.research.uky.edu/Membrane
Several patents have been issued or applied for by faculty associates of the Center. Among these are a means of preventing chemotherapeutic agent-induced cognitive dysfunction in cancer patients. Another patent is for the use of important polyphenolic agents in inhibiting

cancer patients. Another patent is for the use of important polyphenolic agents in inhibiting oxidative stress in the brain with relevance to Alzheimer's disease and other neurodegenerative disorders.

Contact: D. Allan Butterfield, Ph.D.

The Alumni Association Endowed Professor of Biological and Physical Chemistry, Director, Center of Membrane Sciences; and Faculty Associate, Sanders-Brown Center on Aging, 121 Chemistry-Physics Building, University of Kentucky, Lexington, KY 40506-0055

www.chem.uky.edu/research/butterfield/ e-mail: dabcns@uky.edu 859.257.5875 Fax: 859.257.5876

Kentucky Tobacco Research & Development Center www.uky.edu/KTRDC

The Kentucky Tobacco Research and Development Center (KTRDC) conducts and supports unique research programs that examine new agricultural crop opportunities based on tobacco and other plants. The Center's research projects explore the development and use of tobacco as a production system for plant-made pharmaceuticals, and the discovery of new plant natural products having potential for commercialization. The KTRDC program emphasizes applications-oriented research designed to facilitate the development of new crop-based businesses and technologies for Kentucky agriculture.

Kentucky Tobacco Research & Development Center

University of Kentucky, Cooper & University Drives, Lexington, KY 40546-0236

859.257.5798 Fax: 859.323.1077

University of Kentucky College of Pharmacy <u>www.mc.uky.edu/pharmacy</u>

The UK College of Pharmacy is among the top 10 pharmacy schools in the nation and is an international leader in clinical care and pharmaceutical research. UK College of Pharmacy faculty are engaged in pharmaceutical science research with therapeutic targets such as drug abuse, cancer and cardiovascular disease. (from Market Review of the Bluegrass, 2007-08 by The Lane Report.)

Contact: Robert Yokel, Ph.D., Associate Dean for Research & Graduate Education 511 C. Pharmacy Bldg., 725 Rose St., Lexington, KY 40536-0082 859.257.4855

Sampling of Companies Arising from Medical Technology Transfer at the University of Kentucky (UK) - Not intended to be a comprehensive list.

20/20 Gene Systems <u>www.2020gene.com</u>

Dr. Edward Hirschowitz and **Dr. Li Zhong**, both in the University of Kentucky Department of Medicine, have developed a blood test for the detection of early stage lung cancer. Because lung cancer is normally detected only after it has already become fatal, early detection would vastly increase the survival rate of lung cancer patient due to earlier intervention and treatment. There has been considerable interest in commercialization and it has been licensed to 20/20 Gene Systems.

20/20 Gene Systems, 9430 Key West Ave, Rockville MD 20850



AllTranz www.alltranz.com.

AllTranz is a start-up pharmaceutical company based in Lexington, Kentucky. Founder and Chief Scientific Officer **Dr. Audra Stinchcomb** is considered a leading expert in the research area of transdermal delivery and pro-drug development. The company develops pro-drug strategies that work with a range of dermal products to increase absorption through the skin. These new products demonstrate improved drug efficacy, patient compliance and reduced side effects. The AllTranz lead product is for the treatment of pain, especially targeting chronic neuropathic pain.

Contact: Audra L. Stinchcomb, Ph.D., Chief Scientific Officer and Founder, AllTranz Lab, A040 ASTeCC, University of Kentucky, Lexington, KY 40506-0286 859.323-6192 audra@alltranz.com.

ALT Bioscience <u>www.altbioscience.com</u>

ALT BioScience[™] is a specialty bioscience company that discovers, develops and commercializes diagnostic and biomedical technologies focused on oral health and improving systemic disease outcomes and neurodegenerative diseases, such as Alzheimer's and ALS.

Contact: Leslie J. Herzog, **President and CEO**, 315 South Broadway, Suite 100, Lexington, Kentucky 40508 859.388.9445



Intranasal Therapeutics, Inc. (ITI) www.intranasal.com

Intranasal Therapeutics, Inc. (ITI) is a specialty pharmaceutical company focused on developing innovative nasally delivered pharmaceutical products, with a particular focus on drugs treating pain and disorders related to the central nervous system for which there is proven, unsatisfied consumer need. The company currently has four products in the pipeline, with several others in formulation or preclinical development.

Headquarters, 210 Summit Ave., Ste. A-13, Montvale, NJ 07645 R&D Laboratories, 1513 Bull Lea Blvd., Lexington, Kentucky 40511 859.252.5080 Fax: 859.252.7280 Email: info@intranasal.com

OsteoRegeneron, Inc.

Myb induced myeloid protein 1, or mim-1 is a novel, osteoclast secreted chemokine that stimulates differentiation of bone forming osteoblasts and is a therapeutic target for treating bone diseases. The major health problems addressed by OsteoRegneron's technology are osteoporosis, metastatic bone disease and Paget's disease of bone. The principal advantage of this technology (mim-1) is that it targets new bone synthesis rather than inhibiting bone resorption like the majority of available therapeutic modalities.

Contact: John P. Williams, Ph.D., Chief Scientific Officer, OsteoRegeneron and Director, University of Kentucky GCRC Core Laboratory, 800 Rose St. MN521, Lexington, KY 40536 johnwilliams@uky.edu



Nano-Mite Technologies <u>www.nano-mite.com</u>

Nano-Mite Technologies, based on the research of **Dr. Patrick G. Sullivan**, with UK's Spinal Cord & Brain Injury Research Center (SCoBIRC), is focused on controlling obesity—in both humans and pets—using nanotechnology, and is currently testing a nano-scale medical device that serves as mitochondrial uncouplers to increase metabolism and result in weight loss.

Contact: Greg Johnson, CEO, A169 ASTeCC Building, University of Kentucky,

Lexington, KY 40506-0286 859/257-2300 ext. 236.

Spherix, Inc. <u>www.spherix.com</u>



Dr. Robert Lodder (UK College of Pharmacy and Dept. of Chemistry) is the founder and President of Spherix. Spherix has an oral drug, Naturlose, for treatment of Type 2 diabetes in Phase 3 clinical trials across the US. Previous clinical studies indicated that Naturlose had a long-term controlling effect on the disease.

Contact: Robert Lodder, Ph.D., A123 ASTeCC Building, University of Kentucky, Lexington, KY 40506 859.257.9232 Fax: 859.257-2489

University of Louisville Research Commitment – "Think Outside the Lab"

The University of Louisville (U of L) Office of Technology Transfer (OTT) works to get the new knowledge and discoveries of U of L researchers out into the marketplace. To learn more about innovations and research disclosures reported at U of L and see a list of the OTT's corporate alliances go to louisville.edu/thinker.

Cardiovascular Innovation Institute at the University of Louisville http://cv2i.org

The Cardiovascular Innovation Institute (CII) is a partnership between U of L and Jewish Hospital. CII is a state of the art research, testing and clinical center for the development of heart assist devices. At CII, pioneering surgeons (Dr. Laman Gray and Dr. Robert Dowling) have helped put Louisville and Commonwealth of Kentucky on the map in the field of mechanical circulatory support devices to treat heart failure patients. Scientists in Louisville are testing and developing next generation devices designed to treat earlier stage heart failure patients with

less invasive surgical procedures toward realizing their potential to promote myocardial recovery.

Dr. Steven Koenig (U of L Bioengineering Dept.) is developing next generation mechanical circulatory support (MCS) devices that provide partial cardiac assistance. Unlike traditional left ventricular assist devices (LVAD), these new devices are:



- 1) smaller (size, weight, power),
- 2) require a simple, minimally invasive surface surgical procedure (similar to implanting a pacemaker) as opposed to major open heart surgery and extensive recovery time associated with LVAD,
- 3) designed to promote myocardial recovery without the need for heart transplantation or long-term device application by integrating novel control strategies to unload the heart while it rests, optimizes myocardial blood flow, and rehabilitates the heart following recovery, and
- 4) will be a substantially lower cost therapy (device, console, and adjunct treatments) compared to LVAD.

Notably, CII investigators (**Dr. Koenig, Dr. Giridharan, Dr. Dowling, and Dr. Gray**) are also working with SCR Development Group (President, **Paul Spence, MD**, Louisville, KY) on the development of a pneumatic counterpulsation device (CPD).

Contact: Steven C. Koenig, Ph.D., Associate Professor of Surgery, Jewish Hospital Cardiothoracic Surgical Research Institute at the University of Louisville, 500 South Floyd Street, Room 118, Dept Surgery, Louisville, KY 40202 FAX: 502.852-1795 e-mail: steven.koenig@louisville.edu

Dr. Andrea Gobin is developing controlled in vitro biomatrix models using a novel instructional material composed of PEG hydrogels and biochemical signals to examine the spatial organization and temporal sequence of angiogenesis during wound healing. These biomatrices can be used as a tool by pharmaceutical companies to investigate the effect of new drug therapies on angiogenesis without having to perform costly in vivo animal experiments.

Contact: Andrea (Andi) S. Gobin, Ph.D., Asst. Professor, Speed School of Engineering, Bioengineering Dept., 356 Belknap Research Building, University of Louisville, Louisville, KY 40292 502.852.8321 Fax: 502.852.1577 Andrea.Gobin@louisville.edu

Dr. Ayman EI-Baz is developing a clinically usable software tool for early diagnosis of lung cancer. He is collaborating with a small 3-D image reconstruction company.

Contact: Ayman El-Baz, Ph.D., Assistant Professor, Speed School of Engineering, Bioengineering Dept., University of Louisville, Louisville, KY 40292 502.852.5092 Fax: 502.852-1577 <u>aselba01@louisville.edu</u>

Dr. Palaniappan Sethu is using Lab-on-a-Chip (LOC) platforms and microfluidics to develop systems for efficient isolation (sample preparation), culture, manipulation and extraction of information from functionally viable cells for applications in clinical diagnostics and cell biology. Specific projects include isolation of leukocytes and other rare cells from whole blood to aid in the diagnosis of patients suffering from vascular disorders. He is also trying to develop a portable flow cytometer in a LOC platform in collaboration with Dr. Cindy Harnett (Uof L Electrical & Computer Engineering -ECE Dept.)

Contact: Palaniappan Sethu, Ph.D., Assistant Professor, Department of Bioengineering, BRB 357, 2100 S. Brook St., University of Louisville, Louisville, KY 40208 502.852.0351 Fax: 502.852.1577 p.sethu@louisville.edu



Rapid Prototyping Center at U of L http://louisville.edu/speed/rpc/index.htm

The University of Louisville has been assisting industrial users with its Rapid Prototyping Center (RPC) since 1993, when it became the first US university to buy and operate the DTM Selective Laser Sintering Equipment. Some medical device projects at the Rapid Prototyping Center include:

- a device for sub-dermal fixation of common ulnar fractures
- an ergonomic folding crutch
- a portable mechanism for femoral traction and hip replacement
- a laser aiming device for hand held ultrasonic imager
- a hip implant with an internal honeycomb structure

Contact: Ken Davis, Director, Vogt Engineering Center, Vogt Bldg. Rm 101, University of Louisville, Louisville, KY 40292 502.852.1690 FAX: 502.852-8890 ken.davis@louisville.edu

University of Louisville Center for Micro/Nano Technology http://louisville.edu/micronano
The University of Louisville Center for Micro/Nano Technology specializes in providing fabrication and design services for numerous MEMS, microelectronic, electro-optic and nanotechnology applications.

Contact: Dr. Kevin Walsh: walsh@louisville.edu or walsh@ieee.org.

University of Louisville Lutz Microfabrication Center www.mems.louisville.edu

The new Lutz Microfabrication Laboratory is utilized for both research and instructional purposes. It provides a state-of-the-art environment for teaching both the fundamental and current fabrication techniques used to manufacture integrated circuits (ICs), discrete microelectronic devices, MEMS devices such as sensors and actuators, and various electro-optic devices.

Since the new laboratory houses the only general-purpose microfabrication cleanroom facility in Kentucky, it also serves as an appropriate setting for technology transfer of information and projects related to microfabrication. The cleanroom just received a **top 10** national rating by **Small Times** magazine. At U of L, most of the custom miniature medical devices are fabricated in the cleanroom.

Contact: Dr. Kevin M. Walsh, Professor of Electrical and Computer Engineering, Director Lutz and BRB Micro/Nanotechnology Cleanroom University of Louisville, BRB Bldg., Room 234, 2210 S. Brook St, Louisville, KY 40292

502.852.0826 Fax: 502.852-8128 walsh@louisville.edu or

Sampling of Companies Arising from Medical Technology Transfer at the University of Louisville (U of L) (Not intended to be a comprehensive list.)

MetaCyte Business Lab www.metacyte.biz/index.htm

MetaCyte is a health science start-up manufacturing company. The MetaCyte Business Lab team is building a strong portfolio of partner companies, each of which show promise in the biomedical or biotech industries. For the full portfolio of Metacyte companies go to metacyte.biz/portfolio. A profile of a





few of the partner companies follows:

MetaCyte Business Lab LLC, 201 E. Jefferson St.

Louisville, KY 40202-1246

502.569-1020 Fax: 502.569-1021

Contact: Andrew Steen, 502.569-1020 x304 asteen@metacyte.biz

3DR, Inc. www.3DRinc.com

3DR is a service company specializing in 3D reconstructions of multi-slice CT and MRI scans. The company is dedicated to advancing the widespread adoption and utilization of 3D medical imaging by providing hospitals and imaging centers access to a 3D image reconstruction service on a national basis.

1350 Ormsby Park Place, Suite 202, Louisville, KY, 40223

Robert Faulk, M.D., President and Chairman (Co-founder) Contact: Michael E. Lillig, mlillig@3DRInc.com 502.569.1025



Apolmmune www.apoimmune.com/protex.htm

Apolmmune, Inc. is a biotechnology company committed to the development of powerful new therapeutics to treat chronic and acute life-threatening diseases and improve patients' quality of life. Apolmmune is founded on a broad-platform protein-based technology used for immunomodulation; using one's own immune system to treat disease. Apolmmune uses its unprecedented technology platform to enable the safe and selective targeting of a wide array of therapeutics to any specified cell without introducing foreign genetic material into the patient.

1044 East Chestnut Street, Louisville, KY 40204 502.212.2493 info@apoimmune.com

EndoProtech www.metacyte.biz/

Dr. Claudio Maldonaldo, (U of L Department of Physiology and Biophysics, and Department of Surgery) is co-founder and President of Endoprotech. EndoProtech's technology facilitates the rapid delivery and long term display of clinically relevant biotherapeutics on the surface of the vascular endothelium, permitting close monitoring and protection of the vascular surface. The technology shows particular promise in the fields of organ transplantation and invasive cardiovascular surgery.

Contact: Sean T. Kuntz, MS, Metacyte Bus. Lab, 201 E. Jefferson Street, Suite 315, Louisville, KY 40202-1246 502.569.1020 x305 fax: 502.569.1021



Pradama www.pradama.com

Pradama is a specialty pharmaceutical company focused on the development and commercialization of products to treat bone disease. The company's lead product is an orally available small molecule able to induce bone formation for the prevention and/or treatment of osteoporosis.

Contact: William M. Pierce, Jr. Ph.D., President and CEO, 502.852.7424 pierce@louisville.edu Andrew Steen, Vice President of Business Development 502.569.1020 x304 asteen@metacyte.biz www.metacyte.biz.

RhinoCyte, Inc. <u>www.rhinocyte.com</u>

RhinoCyte is focused on the development and commercialization of diagnostic tools and therapies for stem cell treatment of multiple degenerative and traumatic neurological diseases. Potential application of the company's technology includes therapeutic stem cell transplantation with cells from the patient's own nasal cavity, eliminating the need for immunosuppressive therapy. RhinoCyte's innovative process could eventually be used to treat conditions such as Parkinson's disease, multiple sclerosis, Alzheimer's disease, and spinal cord injuries.

Contact: Fred J. Roisen, Ph.D, Founder, President and C.E.O., 201 E. Jefferson, Suite 315, Louisville, KY 40202 502.852.6227 fjrois01@louisville.edu

NaugaNeedles <u>louisville.edu/speed/faculty/myazdanpanah</u>

The company is developing long nanoscale metal needles with many applications to medical research and eventually medical diagnostics. Probes small enough to insert inside single cells, organelles, and bacteria, for testing of adhesion, mechanical properties, electrochemistry, drug delivery, and all with simultaneous real-time monitoring.

Contact: Mehdi M. Yazdanpanah, PhD., Electrical Engineering, Research Faculty Scientist Room 253 BRB, ElectroOptics Research Institute and Nanotechnology Center University of Louisville, Louisville, KY, 40292 502.852.1551

Neuronetrix, Inc. www.neuronetrix.com

Neuronetrix is focused on the development of a non-invasive neurodiagnostic system for the diagnosis of Alzheimer's disease and related dementias.

Contact: John Barker, Ph.D, CEO, 117 E. Kentucky St., 2nd floor, Louisville, KY 40203 502.561.9040 barker@neuronetrix.com.

Novera Pharmaceuticals (a VitaTech company) <u>www.noveradrugs.com</u>

Novera is a Louisville, Kentucky life science company. Novera is developing a revolutionary topical drug that accelerates the wound healing process using its patent pending method of delivering ATP (adenosine triphosphate) directly to cells for wound healing applications.

Contact: Patrick Migliore, CEO, William Ehringer, Ph.D, Co-founder

201 East Jefferson Street, Suite 104, Louisville, KY 40202 502.569.1030 Fax: 502.569.1029

SureGene LLC www.suregene.net

Developed the AssureGeneTM schizophrenia test, which would provide the first DNA-based test for susceptibility to schizophrenia.Contact: **Mark Brennan, Ph.D.**, Louisville, KY



University of Louisville J.B. Speed School of Engineering

speed.louisville.edu

Medical entrepreneurial activity at the "Speed School" has resulted in a number of medical device start-up companies. Profiles of a few of these companies follow.

Contact: Thomas L. Starr, Ph.D., Associate Dean for Research, J.B. Speed School of Engineering, Lutz Hall 436A, University of Louisville Louisville, KY 40292 502.852.1073, tom.starr@louisville.edu.



Assenti www.assenti.net

Assenti creates new therapeutic management techniques enabled by biosensors. Assenti is currently developing an intraocular pressure (IOP) monitoring system, small enough to be implanted into the eye. The information provided by this system improves glaucoma therapy and prevents blindness.

Assenti, 201 E. Jefferson St., Louisville, KY 40299

502.266.7970 Fax: 502-569-1021

Contacts: Paul van der Pol, CEO, 502.266.7970. e-mail: pvdpol@attglobal.net

John Naber, Ph.D., 502.582.7910. e-mail: john.naber@louisville.edu

OrthoData Technologies

OrthoData, a MEMS nanotechnology medical device company's mission is to improve orthopaedic patient care. OrthoData's founders developed the Intelli-Rod system that embeds a tiny "smart" sensor to measure strain on the instrumentation (typically a titanium rod and pedicle screw set) implanted during spinal fusion surgery. The "smart" sensor is battery-free and uses low power microelectronics to transmit data to an electronic scanning wand located outside the body. This system tracks changes in strain on the instrumentation as the spine heals and fusion becomes solid. The Intelli-Rod system allows a surgeon to use an external scanning wand on a paient in the weeks and months following surgery to accurately diagnose fusion at each stage of the healing process.

Contact: Tim Prell, MBA, MSEE, President

OrthoData Technologies LLC, 709 Sentry Way, Louisville, KY 40223 502.384.8401



Sentinel Pediatric BioSensors

Sentinel Pediatric Biosensors provides a wireless device that monitors children's temperatures (called Fever Guard) and sends alerts when the temperature rises past acceptable levels.

Contact: John Naber, Ph.D., Belknap Research Building #238,

University of Louisville, Louisville, K Y 40292 <u>john.naber@louisville.edu</u>.



Medical Manufacturing Companies in Kentucky

Covers NAICS 325411 – Medicinal and Botanical Manufacturing, 334516 – Analytical Laboratory Instrument Manufacturing, 339113 – Surgical Appliance and Supplies Manufacturing, 325412 – Pharmaceutical Preparation Manufacturing, 325414 – Biological Product (except Diagnostic) Manufacturing, 334510 – Electromedical and Electrotherapeutic Apparatus Manufacturing, 325413 – In-Vitro Diagnostic Substance Manufacturing, 334517 – Irradiation Apparatus Manufacturing, 339112 – Surgical and Medical Instrument Manufacturing.

COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
AAF International	10300 Ormsby Park PI # 600	Louisville	KY	40223	(502) 637-0011
Abracair L L C	204 N 17th St	Louisville	KY	40203	(502) 445-9471
ADL Dental Laboratory Inc	4411 Poplar Level Rd	Louisville	KY	40213-1952	(502) 451-2200
Advanced Shielding Tech Inc	23355 Louisville Nashville Tpk	West Point	KY	40177	(502) 922-3009
Akyma Pharmaceuticals LLC	104 Hippocrates Way	Glasgow	KY	42141	(270) 629-2596
All Tech Inc	3031 Catnip Hill Rd	Nicholasville	KY	40356	(859) 885-9613
Alliance Home Care	121 W Virginia Ave	Pineville	KY	40977	(606) 337-3360
Allison Bade	5217 Moccasin Trl	Louisville	KY	40207	(502) 894-4448
Allylix Inc	Coldstream Center 1500 Bull Lea Rd	Lexington	KY	40511	(859) 243-5776
Alternative Pharmaceutical Inc	600 Envoy Cir	Jeffersontown	KY	40299	(502) 493-1973
American Bootworks-One Stop	7415 Preston Hwy	Okolona	KY	40219	(502) 966-2592
American Home Patient Inc	831 Fairview Ave	Bowling Green	KY	42101	(270) 781-8167
American Home Patient Inc	444 S 4th St	Danville	KY	40422	(859) 238-7777
American Home Patient Inc	2456 Fortune Dr # 130	Lexington	KY	40509	(859) 294-7993
American Home Patient Inc	3307 Gilmore Industrial Blvd	Louisville	KY	40213	(502) 968-1751
American Home Patient Inc	3530 Park Plaza Rd	Paducah	KY	42001	(270) 443-8727
American Home Patient Inc	110 W Kentucky Ave	Pineville	KY	40977	(606) 337-6680
American Printing House	1839 Frankfort Ave	Louisville	KY	40206	(502) 895-2405
Amgen Inc	12050 Taylorsville Rd	Louisville	KY	40299	(502) 266-2700
Analytical Solutions And Providers (ASAP)	1511 Neave St.	Covington	KY	41011	(859) 581-6990
Angstrom Technologies Inc	1895 Airport Exchang Blvd #110	Erlanger	KY	41018-3174	(859) 282-0020
Animal Health Care Products	114 W Broadway St	Winchester	KY	40391	(859) 737-3441
Apria Healthcare	1051 Bryant Way # 207	Bowling Green	KY	42103	(270) 781-2787
Apria Healthcare	1805 Taylor Ave	Louisville	KY	40213	(502) 454-3550
Aptis Medical	5 River Hill Rd	Louisville	KY	40207	(502) 899-9700
Aquatic Access Inc	1921 Production Dr	Jeffersontown	KY	40299	(502) 499-9575
Aquatic Access Inc	417 Dorsey Way	Louisville	KY	40223	(502) 425-5817
ARH Homecare Stores	2396 S US Highway 421	Harlan	KY	40831	(606) 573-9275
Armorshield USA LLC	86 Shirt Factory Rd	Stearns	KY	42647	(606) 376-4449
Ashland Prosthetics & Orhodics Services	2816 Carter Ave	Ashland	KY	41101-1917	(606) 324-5786
Associated Photo Co	7103 Turfway Rd # 200	Florence	KY	41042	(859) 282-0011
B & M Medical Co Inc	4723 Brownsboro Gardens Dr	Louisville	KY	40241	(502) 361-3213
Bailey Tool & Supply Inc	1338 S Shelby St	Louisville	KY	40217	(502) 635-6348
Balluff Inc	8125 Holton Dr	Florence	KY	41042	(859) 727-2200



COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
Barry's Mobility & Equip Ctr	426 7th St	Henderson	KY	42420	(270) 869-9197
Beckman Coulter Inc	7381 Empire Dr	Florence	KY	41042	(859) 371-0800
Benton Pharmacy	2602 Main St # 4	Benton	KY	42025	(270) 527-1409
BFW	2307 River Rd # 103	Louisville	KY	40206	(502) 899-1808
Biologics International Inc	8054 Production Dr	Florence	KY	41042-3028	(859) 342-6450
Blaine Pharmaceuticals	1717 Dixie Hwy # 700	Fort Wright	KY	41011	(859) 344-9600
Blu Pharmaceuticals	2445 Nashville Rd # 1	Bowling Green	KY	42101	(270) 783-3075
Breeders Supply & Equipment Co	1060 W High St	Lexington	KY	40508	(859) 254-7791
Burkesville Medical Supply Inc	337 Keen St	Burkesville	KY	42717	(270) 864-2230
Butler Co	1693 Jaggie Fox Way	Lexington	KY	40511	(859) 255-9542
Campbell's Drug	Main St	Mc Kee	KY	40447	(606) 287-7192
Cardinal Health	2201 Regency Rd # 203	Lexington	KY	40503	(859) 276-2402
Cardinal Health	1100 Enterprise Dr	Winchester	KY	40391	(859) 745-2200
Cardinal Health	3906 Produce Rd	Louisville	KY	40218	(502) 964-5150
Cardinal Health PTS LLC	1100 Enterprise Dr	Winchester	KY	40391-9668	(859) 745-2200
Carl Zeiss Optical	1050 Worldwide Blvd	Florence	KY	41042	(859) 689-4777
Castell Interlocks Inc	21 Kenton Lands Rd	Erlanger	KY	41018	(859) 341-3075
Center-Orthotic & Prosthetic	982 Eastern Pkwy	Louisville	KY	40217	(502) 637-7717
Central Brace & Prosthetics Inc	3295 Eagle View Ln	Lexington	KY	40509-1852	(859) 263-7712
Central Kentucky Bearing	217 Ring Rd	Elizabethtown	KY	42701	(270) 765-4195
Choice Systems Inc	9960 Corporate Campus Dr	Louisville	KY	40223	(502) 357-6300
Chromatography Research Supls	2601 Technology Dr	Louisville	KY	40299	(502) 491-6300
Cissell Manufacturing Co	831 S 1st St	Louisville	KY	40203	(502) 587-1292
Clarcor Air Filtration Prods	3807 Bishop Ln	Louisville	KY	40218	(502) 969-2304
Clinic Pharmacy	141 Hospital Dr	Salem	KY	42078	(270) 988-3230
Clopay Plastic Products Co	531 E 4th St	Augusta	KY	41002-1187	(606) 756-2131
CME Iv Inc	1152 Riverside Dr	Prestonsburg	KY	41653	(606) 886-0333
CMI	316 E 9th St.	Owensboro	KY	42303	(270) 685-6281
Commonwealth X-Ray Inc	104 Eisenhour Ct	Nicholasville	KY	40356	(859) 885-4864
Community Methodist Hospital	1305 N Elm St	Henderson	KY	42420	(270) 827-7700
Community Pharmacy Care	103 Landmark Dr # 140	Bellevue	KY	41073	(859) 291-8665
Covalence Adhesives	2320 Bowling Green Rd	Franklin	KY	42134-9611	(270) 586-3261
Custom Glassblowing	8812 Beulah Church Rd	Louisville	KY	40291	(502) 239-1732
Deca Pharmaceuticals LLC	643 Fairview Ave	Bowling Green	KY	42101	(270) 842-3002
Dental Arts Laboratory	8415 US Highway 42	Florence	KY	41042-9679	(859) 647-6100
Derby Dental Laboratory Inc	1303 S Shelby St	Louisville	KY	40217	(502) 635-6778
Dispensers Optical Svc	1815 Plantside Dr	Louisville	KY	40299	(502) 491-3440
Donell Inc	1801 Taylor Ave	Louisville	KY	40213	(502) 452-6079
Dr AB Plummer Products	172 Woodmont Dr	Paris	KY	40361	(859) 987-8890
Dr Zen	4271 Ronnie Lake Rd	Utica	KY	42376	(270) 275-1130
DRE Inc	1800 Williamson Ct	Louisville	KY	40223	(502) 244-4444
Durrett's Orthotic & Prsthtc	20 Medical Village Dr # 100	Edgewood	KY	41017	(859) 341-7688
E Z Care LLC	5015 Atwood Dr	Richmond	KY	40475	(859) 626-8957
Ed Bullard Co	1562 New Lair Rd	Cynthiana	KY	41031	(859) 234-6611



COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
Electra Mold	2775 S Floyd St	Louisville	KY	40209	(502) 327-5110
Electronic Design & Research	7331 Intermodal Dr	Louisville	KY	40258	(502) 933-1362
Emergency Medical Supply Inc	547 Spencer Mattingly Ln	Bardstown	KY	40004	(502) 543-2401
EMS USA	238 Salt Well Rd	Shepherdsville	KY	40165	(502) 543-0821
EMSUSA	218 Salt Well Rd	Shepherdsville	KY	40165	(502) 543-2401
	9900 Corporate Campus Dr				,
Encore Inc	#3000	Louisville	KY	40223	(502) 657-6364
Engineered Inspection Svc Inc	3259 Coral Ridge Rd	Brooks	KY	40109	(502) 955-9021
Falls City Limb & Brace Co	742 E Broadway	Louisville	KY	40202	(502) 778-2959
Fibreworks Corp	2417 Data Dr	Louisville	KY	40299	(502) 499-9944
Fisher & Hinnant Prosthetic & Orthotics	3916 Dupont Sq South #B	Louisville	KY	40207-4649	(502) 896-9464
Flottman Co	720 Centre View Blvd	Crestview Hills	KY	41017	(859) 331-6636
Foam Design Inc	444 Transport Ct	Lexington	KY	40511	(859) 231-7006
Franklin-Williams Co	116 Venture Ct # 12	Lexington	KY	40511	(859) 259-0515
Galls Inc	2680 Palumbo Dr	Lexington	KY	40509	(859) 266-7227
GE Medical Systems	11513 Commonwealth Dr	Louisville	KY	40299	(502) 339-3095
Genesis Medical Inc	13005 Middletown Ind Blvd	Louisville	KY	40223	(502) 245-1189
Geri Med Inc	9505 Williamsburg Plz	Louisville	KY	40222	(502) 423-0351
Gibson Laboratories Inc	1040 Manchester St	Lexington	KY	40508-2422	(859) 254-9500
Gibson's Pharmacy Home Care	715 E Broadway St	Mayfield	KY	42066	(270) 247-2162
Glasgow Prescription Ctr	139 W Public Sq	Glasgow	KY	42141	(270) 651-8889
Glo Marr Products Inc	400 Lincoln St	Lawrenceburg	KY	40342-1282	(502) 839-6996
Gould Discount Medical	3901 Dutchmans Ln # 100	Louisville	KY	40207	(502) 491-2000
Grandpa Brands Co	1820 Airport Exchange Blvd	Erlanger	KY	41018-3192	(859) 647-0777
		Russell			
Grider Drug	124 Dowell Rd # 100	Springs	KY	42642	(270) 866-2686
Griffin Industries Inc	305 Priest St	Henderson	KY	42420-5616	(270) 827-9933
Grogan's Healthcare Supply	1016 S Broadway	Lexington	KY	40504	(859) 254-6661
H & N Drug	103 Main St # 1	Manchester	KY	40962	(606) 598-5025
H & S Chemical Co	1025 Mary Laidley Dr	Covington	KY	41017	(859) 356-8000
H L Lyons Co	11401 Electron Dr	Louisville	KY	40299-3857	(502) 267-0087
Hanger Prosthetics & Orthotics	2025 Leestown Rd # Q	Lexington	KY	40511	(859) 255-3301
Hanger Prosthetics & Orthotics	1023 E Broadway	Louisville	KY	40204	(502) 585-2139
Hanger Prosthetics & Orthotics	4655 Alben Barkley Dr	Paducah	KY	42001	(270) 554-0100
Harrison Medical Inc	721 S Preston St	Louisville	KY	40203	(502) 589-9325
Heartland Medical Sales & Svc	2601 Holloway Rd	Louisville	KY	40299	(502) 671-1014
Hi Tech Artificial Limbs	500 Southland Dr	Lexington	KY	40503	(859) 278-2389
Hill-Rom Co Inc	1838 Cargo Ct	Louisville	KY	40299	(502) 491-0642
Hospital Specialty Co	500 Memorial Dr	Nicholasville	KY	40356	(859) 887-2454
Hutchinson's Drug Store	401 W Main St # 130	Lexington	KY	40507	(859) 252-3554
Ice Bag Support	1117 N 8th St # 201	Paducah	KY	42001	(270) 443-0444
Image Analysis Inc	1380 Burkesville St	Columbia	KY	42728-2022	(270) 384-6400
Inoac USA Inc	901 Nutter Dr	Bardstown	KY	40004	(502) 348-6879
Interplex Plastics Inc	1086 Brentwood Ct	Lexington	KY	40511-1233	(859) 231-6100



COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
Intranasal Therapeutic, Inc.	1513 Bull Lea Road	Lexington	KY	40511-1200	(859) 252-5080
Isopure Corp	141 Citizens Blvd # A	Simpsonville	KY	40067	(502) 722-1000
J & R Enterprises	1070 Russell Dr	Murray	KY	42071	(270) 436-2022
Jamestown Valu-Rite Pharmacy	1417 N Main St	Jamestown	KY	42629	(270) 343-4443
Junkin Safety Appliance Co Inc	3121 Millers Ln	Louisville	KY	40216-5345	(502) 775-8303
K B D Inc	2550 American Ct	Erlanger	KY	41017	(859) 331-0800
KBC Intl	140 Venture Ct # 1	Lexington	KY	40511	(859) 253-9688
Kentucky BioProcessing LLC	3700 Airpark Drive	Owensboro	KY	42301	(270) 689-2570
Kentucky Nutrition Service Inc	110 Railroad St	Lawrenceburg	KY	40342-1133	(502) 839-4222
Kentucky Pharmacists Assn	1228 US Highway 127 S	Frankfort	KY	40601	(502) 227-2303
Kentucky Prosthetics Inc	339 S Preston St	Louisville	KY	40202	(502) 585-4228
Kentucky Textiles Inc	2008 Cypress St	Paris	KY	40361	(859) 987-5228
King Home Care	115 N Main St	Tompkinsville	KY	42167	(270) 487-5127
King KOIL Mid-South	114 Corporate Ct	Bowling Green	KY	42103	(270) 782-7311
Krauss-Maffei Corp	7095 Industrial Rd	Florence	KY	41042	(859) 283-0200
Laboratory Corp Of America	703 Mcdowell Blvd	Bardstown	KY	40004	(502) 349-0984
Laboratory Supply Company Inc	250 Ottawa Ave	Louisville	KY	40209	(502) 363-1891
Lawrenceburg Supply Co	237 E Court St	Lawrenceburg	KY	40342	(502) 839-4593
Lawrence-NELSON LLC	325 Virginia Ave	Lexington	KY	40504	(859) 252-0335
Legacy Oxygen & Medical Equip	924 S 12th St	Murray	KY	42071	(270) 753-2001
Linak US Inc	2200 Stanley Gault Pkwy	Louisville	KY	40223	(502) 253-5595
Littleford Day Inc	7451 Empire Dr	Florence	KY	41042	(859) 525-7600
Lohmann Tech Corp	3000 Earhart Ct # 155	Hebron	KY	41048	(859) 334-4900
Lovejoy Medical Inc	142 Baird Ave	Pikeville	KY	41501	(606) 437-0608
Lyons Fixtures	11301 Electron Dr	Louisville	KY	40299	(502) 240-5802
Magna Pharmaceutical	10801 Electron Dr # 100	Louisville	KY	40299	(502) 254-5552
Major Pharmaceuticals	1103 Northwood Dr	Murray	KY	42071-3590	(270) 753-6654
Mallinckrodt Inc	7001 Bypass Rd	Paris	KY	40361	(859) 987-9300
Mammoth Medical	10620 Scottsville Rd	Glasgow	KY	42141	(270) 646-4586
Mann Chemical Corp	757 Logan St	Louisville	KY	40204	(502) 585-2001
Martek Biosciences Corp	555 Rolling Hills Ln	Winchester	KY	40391	(859) 744-0920
Med Pro Inc	817 Winchester Rd # 200	Lexington	KY	40505	(859) 225-5375
Med-Dyne	2775 S Floyd St	Louisville	KY	40209	(502) 429-4140
Medi Home Care	2337 Elizabethtown Rd	Leitchfield	KY	42754	(270) 259-6347
Medicaid Services Dept	275 E Main St	Frankfort	KY	40601	(502) 564-4321
Medical Imaging Intl	PO Box 20175	Louisville	KY	40250	(502) 499-5948
Medi-Home Care	1636 Booth Quillen Rd # B	Ashland	KY	41102	(606) 928-5731
Medi-Home Care	24 Hager Dr	Belfry	KY	41514	(606) 237-8373
Medi-Home Care	1603 S Main St	Corbin	KY	40701	(606) 523-0195
Medi-Home Care	46 Judy Dr	Harlan	KY	40831	(606) 573-2445
Medi-Home Care	102 E Franklin St	Louisa	KY	41230	(606) 638-9482
Medi-Home Care	1202 Triplett St	Owensboro	KY	42303	(270) 683-3830
Medi-Home Care	912 Broadway St	Paintsville	KY	41240	(606) 789-5453
Microsensor Systems Inc	62 Corporate Ct	Bowling Green	KY	42103	(270) 745-0099



COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
Mila International	12 Price Ave	Erlanger	KY	41018	(859) 371-1722
Molding Solutions	781 Enterprise Dr	Lexington	KY	40510	(859) 231-0031
Montebello Packaging	650 Industrial Dr	Lebanon	KY	40033	(270) 692-5760
Mountain Comprehensive Health	77 E Main St # C	Whitesburg	KY	41858	(606) 632-2800
Murty Pharmaceuticals Inc	518 Codell Drive	Lexington	KY	40509-1016	(859) 266-2446
Muster Associate Inc	135 E 3rd St	Calhoun	KY	42327	(270) 273-3964
Nelson Pharmacy	1112 Main St	Benton	KY	42025	(270) 527-3616
Neogen Corp	944 Nandino Blvd	Lexington	KY	40511	(859) 254-1221
Newtex Industrial	2321 State Route 94 E	Murray	KY	42071	(270) 753-6420
OBAMED Inc	4708 Pinewood Rd	Louisville	KY	40218	(502) 969-9652
Oceans Seven Intl	2704 Parklawn Dr	Louisville	KY	40217	(502) 634-3221
Olsen Medical	3001 W Kentucky St	Louisville	KY	40211-1505	(502) 772-4280
Omnicare Inc	100 E Rivercenter Blvd # 1600	Covington	KY	41011	(859) 392-3300
Omniteck Inc	4044 Palmetto Springs Way	Lexington	KY	40513	(859) 224-2568
On Traxx Solutions	7100 Tradeport Drive	Louisville	KY	40214	(502) 937-3166
Optical Dynamics Corp	10100 Bluegrass Pkwy	Louisville	KY	40299	(502) 671-2020
Option Care Home	112 Dennis Dr	Lexington	KY	40503	(859) 277-4663
Orthopaedic Services-Paducah	2021 Broadway St # 2	Paducah	KY	42001	(270) 444-0948
Osman Pharmacy	507 2nd St	Vanceburg	KY	41179	(606) 796-2932
Owens & Minor Inc	1605 Worldwide Blvd	Hebron	KY	41048	(859) 282-7910
Paul	25 Oakwood Cir	Pendleton	KY	40055	(502) 743-0430
Paul's Pharmacy	434 Scott St	Covington	KY	41011	(859) 431-3304
Pedia Med	7310 Turfway Rd # 300	Florence	KY	41042	(859) 282-8582
Pennyrile Home Medical	307 Main St	Cadiz	KY	42211	(270) 522-8002
Peptides International Inc	11621 Electron Dr	Louisville	KY	40299-3861	(502) 266-8787
Pfizer Inc	721 Haggin Pl	Lexington	KY	40504	(859) 276-4061
Pharma Center	6850 Midland Industrial Dr	Shelbyville	KY	40065	(502) 647-2300
Physician Sales & Svc Inc	5150 Interchange Way # B	Louisville	KY	40229	(502) 810-2800
Pi Pharma Inc	30 Twin Branch Rd	Campton	KY	41301-8839	(606) 725-4201
	1895 Airport Exchange Bl #				
Plasma Technology	190	Erlanger	KY	41018	(859) 647-0730
PMI	2205 Watterson Trl	Jeffersontown	KY	40299	(502) 267-1100
Poole's Pharmacy Care	311 Henton St	Livermore	KY	42352	(270) 278-5537
Post-Glover Lifelink Inc	167 Gap Way	Erlanger	KY	41018	(859) 283-5900
Praxair Healthcare Svc	10500 Bluegrass Pkwy	Jeffersontown	KY	40299	(502) 499-9099
Preferred Medical Supply Inc	223 Steedly Dr	Louisville	KY	40214	(502) 368-0780
Preiser Scientific Inc	1505 Bernheim Ln	Louisville	KY	40210	(502) 636-3307
Premier Home Care	1060 Center Dr	Richmond	KY	40475	(859) 623-5028
Producers Veterinary Supply Co	1028 Story Ave	Louisville	KY	40206	(502) 584-7065
Professional Medical Supplies	342 Bogle St	Somerset	KY	42503	(606) 451-0216
Prosthetic & Orthotic Assoc	1641 Nicholasville Rd	Lexington	KY	40503	(859) 277-3700
PSC Fabricating Corp	3001 W Kentucky St	Louisville	KY	40211	(502) 625-7700
Pulmo Dose Inc	120 Max Hurt Dr	Murray	KY	42071	(270) 753-2269



COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
Q E D Inc	750 Enterprise Dr	Lexington	KY	40510-1030	(859) 231-0338
Quest Pharmaceutical	300 Chestnut St	Murray	KY	42071	(270) 759-1248
R & S Medical Inc	10620 Scottsville Rd	Glasgow	KY	42141	(270) 646-3024
R & S Sales	8407 Austin Tracy Rd	Fountain Run	KY	42133	(270) 434-2045
R A Jones & Co Inc	2701 Crescent Springs Pike	Covington	KY	41017	(859) 341-1807
R X Med	9505 Williamsburg Plz	Louisville	KY	40222	(502) 327-8889
Raynostix Corp	11430 Watterson Ct # 500	Louisville	KY	40299	(502) 636-0487
•	11700 Commonwealth Dr #				
Rehab Designs Inc	200	Jeffersontown	KY	40299	(502) 266-9061
Respro	1360 W 5th St	London	KY	40741	(606) 878-7522
Restorative Medical Inc	332 Broadway St	Brandenburg	KY	40105-1146	(270) 422-5454
Retroactive Bioscience	1 Moock Rd # 3b	Wilder	KY	41071	(859) 431-4660
Richie Pharmacal Co	119 State Ave	Glasgow	KY	42141	(270) 651-6159
Rogers Foam Corp	120 Clarence Dr	Mt Sterling	KY	40353	(859) 497-0702
Rouben's Pharmacy	2355 Poplar Level Rd # 101	Louisville	KY	40217	(502) 458-3229
Safety Effects	3657 Fisher Ford Rd	Lancaster	KY	40444	(859) 548-9119
Safety Today	1108 S Broadway	Lexington	KY	40504	(859) 253-3933
SCA Personal Care	7030 Louisville Rd	Bowling Green	KY	42101	(270) 796-9300
Scooter Store	412 Production Ct	Louisville	KY	40299	(502) 491-9968
Scott-Gross Co Inc	664 Magnolia Ave	Lexington	KY	40505	(859) 252-7667
Sea-Long Medical Systems Inc	1987 South Park Rd	Okolona	KY	40219	(502) 969-4949
Spacelabs	1919 Arboro Pl	Louisville	KY	40220	(502) 491-4641
Spec Tape Inc	2771 Circleport Dr	Erlanger	KY	41018	(859) 283-2044
Sperti Sunlamp	2550 American Ct	Erlanger	KY	41017	(859) 331-0800
Spinal Systems Inc	8075 National Turnpike	Louisville	KY	40214	(502) 367-4024
Springhill Pharmacy	2305 Russellville Rd	Bowling Green	KY	42101	(270) 796-3909
St Claire Home Care Hospice	811 2nd St	Vanceburg	KY	41179	(606) 796-6913
Standard Labs	1437 Portland Ave	Louisville	KY	40203	(502) 562-2770
Stephens Instruments	2500 Sandersville Road	Lexington	KY	40511-2400	(859) 259-4924
Stryker Orthopaedics	1218 S Broadway # 110 B	Lexington	KY	40504	(859) 276-2342
Stryker Orthopaedics	2728 River Green Circle	Louisville	KY	40206-1086	(502) 893-6618
Stultz Pharmacy Inc	1615 Ashland Rd	Greenup	KY	41144	(606) 473-7346
Synaptic Tan	204 N 17th St	Louisville	KY	40203	(502) 584-0971
Tempur-Pedic Intl Inc	1713 Jaggie Fox Way	Lexington	KY	40511	(859) 259-0754
Tente Casters Inc	2266 S Park Dr	Hebron	KY	41048	(859) 586-5558
Therapy Technology Inc	1301 W Rhudes Creek Rd	Elizabethtown	KY	42701	(270) 769-9409
Thomas Industries Inc	4360 Brownsboro Rd	Louisville	ΚY	40207	(502) 893-4600
Tom Watson's Prosthetic Lab	2819 W 4th St	Owensboro	KY	42301	(270) 684-6128
Towne & Country Pharmacy	517 Old Highway 60	Hardinsburg	KY	40143	(270) 756-2151
U S Biotex	RR 1 Box 62	Webbville	KY	41180	(606) 652-4700
Uniform Boutique	50 Pritchett Ave	Madisonville	KY	42431	(270) 825-4003
USIOL	2500 Sandersville Rd	Lexington	KY	40511	(859) 259-4925
Vangard/NCS Healthcare of KY	835 N L Rogers Wells Blvd	Glasgow	KY	42141-1279	(270) 651-6188
Victor Packaging Inc	2101 Plantside Dr	Jeffersontown	KY	40299	(502) 499-1202



COMPANY NAME	STREET ADDRESS	CITY	KY	ZIP CODE	TELEPHONE
Whip Mix Corp	361 Farmington Ave	Louisville	KY	40209	(502) 637-1451
Wickliffe Pharmacy	409 Court St	Wickliffe	KY	42087	(270) 335-3172
Wire Crafters	6208 Strawberry Ln	Louisville	KY	40214	(502) 367-9539
Xanodyne Pharmaceutical Inc	1 Riverfront PI # 900	Newport	KY	41071	(859) 371-6383
XMP	2123 Watterson Trl	Louisville	KY	40299	(502) 267-0044
Xpedx	6710 Grade Ln	Louisville	KY	40213	(502) 361-5566
Zotefoams	55 Precision Dr	Walton	KY	41094	(859) 371-4025

Announced/Reported Western Europe Investment in Kentucky

Akzo Nobel Coatings Inc Employees / Parent Company

Corporate office 40 *Akzo Nobel NV **Netherlands** 2031 Nelson Miller Parkway Louisville, KY 40223-2185 (2007) Velperweg 76

6824 BM Arnhem PHONE: 502-254-0470 FAX: 502-253-0573 Postbus 9300 6800 SB Arnhem Established: 1982

Akzo Nobel Coatings Inc

Netherlands R&D, lab facility 21 *Akzo Nobel NV 4730 Crittenden Drive, Ste 2

Louisville, KY 40209-1518 (2007) Velperweg 76 6824 BM Arnhem PHONE: 502-375-5338 FAX: 502-363-4105 Postbus 9300 Established: 1982 6800 SB Arnhem

Balluff Inc

165 *Balluff GmbH Germany 8125 Holton Dr Electronic sensors for

Florence, KY 41042-3009 industrial automation: (2007) Schurwaldstr. 9

PHONE: 859-727-2200 inductive proximity 73765 Neuhausen, Germany

sensors, optoelectronic

FAX: 859-727-4204 sensors, linear position transducers & automatic Established: 1980

identification

1999

Krauss-Maffei Corp

172 *Mannesmann Plastics Germany 7095 Industrial Rd Reaction process,

(2007) Machinery GmbH Florence, KY 41042-2930 extruding & injection

PHONE: 859-283-0200 molding equipment

Krauss-Maffei Strasse 2 D-80997 Munich FAX: 859-283-0291

Germany Established: 1985

Linak US Inc

Established:

150 *Linak A/S Denmark 2200 Stanley Gault Pkwy Assemble power actuators

Anchorage, KY 40223 for hospital beds, furniture (2006) Smedevaeget 8

PHONE: 502-253-5595 Nordborg, Denmark 6430 FAX: 502-253-5596



Employees / Parent Company

Germany

Kingdom

States

Lohmann Technologies Corp

3000 Earhart Ct # 155 Pressure sensitive Hebron, KY 41048-8297 PHONE: 859-334-4900

859-334-4903 FAX. Established: 1988

33 *Lohmann GmbH & Co KG adhesive tapes - foam (2006) Postfach 2343

mounting tapes and D-56513 Neuwied splicing tapes Germany D-56513 Germany D-56513

Post Glover LifeLink

167 Gap Way Isolated Power Systems 35 *Halma Holdings Inc United (2006) 3100 E Kemper Rd **States** Erlanger, KY 41018 and accessories, line

PHONE: 859-283-5900 isolation monitors, patient Cincinnati, OH 45241 service consoles and

FAX: 859-372-6272 power columns. We also *Halma Plc United design and manufacture *Halma Plc United Established: 1957

aluminum surface Misbourne Court, Rectory Way Amersham, Buckinghamshire HP7

ODE United Kingdom

R A Jones & Co Inc 360 *IWKA Packaging GmbH Germany 2701 Crescent Springs Pike Specialty packaging

Covington, KY 41017 machinery, equipment & (2006) Lorenzstrasse 6

PHONE: 859-341-0400 systems Stutensee, Germany 79297 FAX: 859-341-0519

SCA Personal Care

1905

Established:

Protective pads, briefs, 140 SCA Group Sweden 7030 Louisville Rd

and protective underwear (2006) Box 7827, SSE-103 97 Bowling Green, KY 42101-8413 PHONE: 270-796-9300 products for light to heavy Stockholm, Sweden

incontinence for both

FAX: 270-796-3181 institutional use and retail *SCA Hygiene Products United purchase *SCA Hygiene Products United Established: 1988

500 Baldwin Tower Eddystone, PA 19022

Tente Casters Inc 2266 Southpark Dr 77 *Tente-Rollen GmbH Germany Furniture, health care &

(2006) Postfach 50 14 30 Hebron, KY 41048-9537 food service equipment D-42907 Wermelskirchen PHONE: 859-586-5558 casters 859-586-0341 Herrlinghausen 75 FAX.

D-42929 Wermelskirchen Established: 1979

Zotefoams Inc

Block foams; plastic foam 34 *Zotefoams Plc United 55 Precision Drive Kingdom Walton, KY 41094-7467 (2006) 675 Mitcham Road

PHONE: 859-371-4216 Croydon, Surrey CR9 3 AL FAX: 859-371-4832 United Kingdom 2001 Established:



Kentucky Companies presenting at BIO 2007

Advanced Genomic Technology

EugeniaWangAGT@CS.com

MicroRNA microarrays that detect human, rodent, fruit fly, nematode, and viral pathogens. Adult bone marrow stem cell systems for rapid, scarless wound healing.

Nano-Mite Technologies

www.nano-mite.com

Nanoscale medical devices that uncouple mitochondrial respiration from ATP production to increase metabolism. Uses include weight control and othermetabolic control treatments.

Apolmmune

www.apoimmune.com

Strong platform technology for immunotherapy. Focused on 3 distinct therapeutic areas; organ transplantation (with emphasis on Type 1 Diabetes), cancer, and infectious disease. Phase 1clinical cancer trial in Q2 2008.

• Pradama <u>www.pradama.com</u>

Products to treat bone diseases and disorders. Lead program in osteoporosis – orally available small molecule. Series of products based on bone-targeting drug delivery.

ALT Bioscience

www.ALTBioscience.com

Rapid point-of-care diagnostic and biomedical technologies focused on oral/systemic health and neurodegenerative diseases. A blood test for Alzheimer's and ALS is in late-stage development.

• Alltranz www.alltranz.com

A specialty pharma company targeting the development of proprietary neuroscience solutions via innovative transdermal systems and codevelopment of topical drugs with strategic partners.

• SureGene www.SureGene.net

Genetic test predicts response to antipsychotic drugs and provides risk-assessment for schizophrenia in high-risk patients. Genetic panel is now in trials for a 2008 release.

EndoProtech

www.metacyte.biz/endoprotech.htm

Technology to reduce Ischemia Reperfusion Injury associated with transplant and cardiovascular procedures via rapid delivery and durable display of bio-therapeutics on the vascular surface.

Kentucky BioProcessing

www.kbpllc.com

A contract bioprocessor with state-of-the-art facilities, experienced personnel and intellectual property that provides customers with an unequaled quality and range of bioprocessing services. Works with customers on a confidential basis to extract purified proteins and other value added products from plants and other organic materials.

Kentucky Biotechnology Organizations and Industry

Kentucky BioAlliance

229 West Market Street, 3rd Floor Louisville, KY 40202

502-561-1240 Ext. 102 Voice

<u>Louisville Medical Center Development</u> Corporation

501 E Broadway Suite 160 Louisville, KY 40202 502-584-7824

Greater Louisville Health Enterprises

600 W Main Street Louisville, KY 40202 502-625-0151 Voice

MetaCyte Business Lab LLC

201 E. Jefferson Street Suite 315 Louisville, KY 40202-1209 502-569-1020 Voice Adams Brands Warner-Lambert Company

6356 Limewood Circle Louisville, KY 40222 502-429-0429 Voice Pharmaceutical Preparation

Pharmaceutical Prepa

Adams Research Associates 333 Sumpter Avenue Bowling Green, KY 42101 270-746-9595 Voice Biological Research

Advance ChemTech Inc

5609 Fern Valley Road Louisville, KY 40228 502-969-0000 Voice Supplies instruments, biochemicals & production services for pharmaceutical research

Advanced SynTech

9800 Bluegrass Parkway Louisville, KY 40299 502-499-0122 Voice pharmaceuticals

Allife

106 N Locust Street Carlisle, KY 40311 859-289-2367 Voice Pharmaceutical Preparation

Alltech

3031 Catnip Hill Pike Nicholasville, KY 40356 859-885-9613 Voice

Amgen Inc.
Distribution Center
12000 Plantside Drive
Louisville, Kentucky 40299
502-266-2700 Voice



Cabinet for Economic Development

Apolmmune Inc

1044 E. Chestnut Street Louisville, KY 40204 502-569-1020 Voice biologics

Aptamera Inc

640 S. 4th Street, Suite 400 Louisville, KY 40299 502-587-0939 Voice cancer diagnostics/therapeutics

Auspep LLC North America 4350 Brownsboro Road Louisville, KY 40207 502-893-4369 Voice Pharmaceutical Preparation

Biologics International Inc

8054 Production Drive Florence, KY 41042 859-342-6450 Voice Pharmaceutical Preparation

Cintain LLC

1018 Baywater Drive Union, KY 41091 859-384-7192 Voice Biotechnology Research

eMergINT, Inc.

501 E. Broadway, Suite 250 Louisville, Kentucky 40202 502-852-1665

Enviroderm Pharmaceuticals

1600 W Hill Street Louisville, KY 40201 502-634-7700 Voice Pharmaceuticals

Glaxo Wellcome in Lee War 1708 Golden Leaf Way Louisville, KY 40245 502-244-5945 Voice Pharmaceutical Preparation

Helios Pharmaceuticals Inc

9800 Bluegrass Parkway Louisville, KY 40299 502-499-0122 Voice

Hoffman-LaRoche Inc 2900 Chancellor Drive Covington, KY 41017 859-578-0440 Voice Pharmaceuticals Howard Drug Group LLC 1103 Northwood Drive Murray, KY 42071 270-753-7152 Voice Pharmaceuticals

International Pharmaceutical 125 Lantern Way Nicholasville, KY 40356 606-223-6776 Voice Pharmaceuticals

IPC

1100 Enterprise Drive Winchester, KY 40391 859-745-2200 Voice Pharmaceutical Preparation

Large Scale Biology Corporation 2301 Tried Drive Ownesboro, KY 42301 270-926-2405 Voice Agricultural Research

Liposome Company Inc

10601 Gleneagle Place Louisville, KY 40223 502-245-7560 Pharmaceutical Preparation

<u>Louisville Metabolic and</u> Atherosclerosis Research Center, Inc

3288 Illinois Avenue Louisville, KY 40213 502-515-5672

Martek Biosciences Corporation

555 Rolling Hills Lane Winchester, KY 40391 859-744-0920 Voice biotechnology

MedPharm Corporation 1128 Hwy 127 US, Suite D Frankfort, KY 40601 502-226-2903 Pharmaceuticals

MedVenture Technology Corporation

1046 E. Chestnut Street Louisville, KY 40204 502-634-5900 Voice medical devices Murty Pharmaceuticals Inc 518 Codell Drive Lexington, KY 40509 859-266-2446 Voice Pharmaceuticals

Novartis

89 Lantern Way Nicholasville, KY 40356 859-223-8541 Voice Pharmaceuticals

Peptides International Inc

11621 Electron Drive Louisville, KY 40299 502-266-8787 Voice Pharmaceuticals

Pharmacology Toxicology RES LabE

3945 Simpson Lane Richmond, KY 40475 859-624-8111 Voice Agricultural Research Lab

Pharmaron LLC 201 E. Jefferson Street Louisville, Kentucky 40202-1209 502-569-1047

Pro-Nutech

PO Box 12011 Lexington, KY 40579 606-744-6931 Voice Pharmaceuticals Regenerex LLC 201 E. Jefferson Street Louisville, Kentucky 40202-1209 502-292-1740 Voice

Schering Sales Corporation

2638 Chatham Lane Owensboro, KY 42303 270-926-3909 Voice Pharmaceuticals

Sheltowee, LLC

1044 E Chestnut Street Louisville, KY 40202 502-515-1492 Voice pharmaceuticals

Smith Farms Inc 125 Promenade Court Louisville, KY 40223 502-423-9777 Voice Agricultural Research

Transduction Laboratories

133 Venture Court, Suite 5 Lexington, KY 40511 606-259-1550 Voice Develops antibodies for research



Cabinet for Economic Development

Kentucky Science and Technology Awards in Human Health and Development

Murty Pharmaceuticals, Inc. Ram Murty Fayette County	Antibiotic Gel - in situ sustained release Sustained-release antibiotic gel that improves patient compliance for delivering a variety of compounds that prevent and treat localized infections
B&B Sales, Inc. Ben Falmlen <u>Clark County</u>	Pulse Trainer - Weight Training Device Weightlifting device that improves athletes' aerobic and isometric workouts
R.A.M.M., LLC Anthony McEldowney Bourbon County	Medicine Dispenser Working with the University of Kentucky to develop a patented computer regulated medicine dispenser.
Jackson Peg Tube Stands, LLC Tina Jackson <u>Lawrence County</u>	A new feeding tube support structure for the convalescence market. Designed a patent pending device that supports a syringe used to deliver food product to a feeding-tube dependent person.
ChemPharma Intl. LLC Steven Mobley <u>Madison County</u>	Medical device - size of a cigarette lighter to treat anxiety disorders Development of a medical device aimed at the treatment of claustrophobia panic attack disorder.
OrthoData Technologies, LLC Tim Prell <u>Jefferson County</u>	Diagnostic system for orthopaedic surgeons Developed a breakthrough diagnostic system that will allow orthopaedic surgeons to accurately diagnose the success of spinal fusion and eliminate the need for unnecessary exploratory surgery.
Neuronetrix Solutions, Inc. K.C. Fadem <u>Jefferson County</u>	Instruments to diagnose dyslexia in newborns. Developed the first noninvasive dyslexia screening system for use in newborns, R.E.A.D.S. ™ (Rapid Early Auditory Dyslexia Screening).
University of Louisville William Pierce Jefferson County	New therapeutic compounds for the treatment of osteoporosis. Discovered new therapeutic compounds for treatment of osteoporosis: one group contains anabolic compounds and the other novel bone-targeting carrier compounds.
Forsythe & Gregory Sybil Forsythe <u>Madison County</u>	Life device for people with communications or swallowing disorders. A cup/straw combination which serves a dual purpose for individuals with communication and swallowing disorders.



Cymbion, LLC Vinod Narula <u>Jefferson County</u>	Patented anti-infection solution and applicators. Patented a waterless anti-infection solution, which substantially improves the effectiveness of the pre-surgical hand santizing, as well as a pre-surgical scrub brush with enhanced ergonomical design.
University of Kentucky Research Foundation John Williams Fayette County	Mim-1 in Anabolic Bone Therapy Demonstrated that osteoclasts secrete a protein, which was identified as mim-1 (myb-induced myeloid protein-1). Patented this technology in bone by demonstrating that mim-1 stimulates increased osteoblast precursor cell migration, as well as the differentiation of osteoblastic precursor cells.
Polyionics Inc. DBA The Nutrition Farm Donald Jessup Wolfe County	Arthritis cream and aquaceutical Australian Dream, an OTC arthritis pain relief cream, along with Aqua Plus, an aquaceutical, are twoproducts offered by Polyionics, Inc.
Four Tigers LLC Paige Shumate Short Bourbon County	Oral blackberry capsule Exploring the opportunity to develop an oral blackberry capsule to treat and prevent disorders of the gastrointestinal (GI) tract.
Yikes LLC Sharon Bolar Scott County	System of locking storage containers designed to prevent access by children. The "Toy Treasure Chest" enables a child to learn discipline by allowing the parent or child care provider to have control over the number of toys that can be used at one time.
Western Kentucky University Research Foundation Shivendra Sahi Warren County	New antiviral therapies for herpes simplex virus. This project will study the potential antiviral activities in the extract from a leguminous plant.
Applied Force, LLC David Kitchen Warren County	The Max Force Meter is a force measurement device The product allows an individual to increase muscle strength and performance while reducing chance of injury. The product can be used in weight training to monitor, track, and analyze performance.
Carlen Enterprises, LLC Hugh (DJ) Carlen <u>Larue County</u>	DUST-OFF Insect repellent Safe and clean insect repellant product used by soldiers in Iraq and tested during a military project in the woods of Ft. Knox.
Solution Cap, LLC Lisa Carr <u>Hardin County</u>	Hair cap designed to prevent leakage of hair treatment solutions This device will provide a much needed solution in the hair perming process that will increase comfort level for



Cabinet for Economic Development

	clients and provide for ease of use by beauty professionals.
Bioden Technologies, LLC John Finney <u>Johnson County</u>	Human Health and Development
OTC Solutions Richard Timberlake <u>Greenup County</u>	Over The Counter treatments for the self-medicating market OTC Solutions will provide the OTC industry with their own brand of unique alternatives to the antiquated products currently available through Retail, Wholesale and Clinical use.
AllTranz Inc. 2 THC Audra Stinchcomb Fayette County	Transdermal delivery of tetrahydrocannabinol AllTranz is focued on the opportunity to deliver medications through transdermal drug delivery systems. Pain management (fentanyl) transdermal patches have been widely accepted but they have very serious GI and respiratory side effects. The company is evaluating new proprietary drug formulations for pain relief in a transdermal delivery system that avoid these side effects. The AllTranz product is intended to target pain relief, primarily nerve-related pain.
AllTranz 3 Device Audra Stinchcomb Fayette County	Prototype development of an instrument for imaging drug concentrations in skin. AllTranz is focused on the opportunity to deliver medications into and through the skin. Dermatological and hair follicle associated diseases and conditions are very difficult to treat. The company is evaluating new proprietary research methods to assess the performance of these formulations. The specialized AllTranz research and development service is intended to maximize efficiency and reduce drug development costs.
AllTranz Inc. 4 Microneedle Audra Stinchcomb Fayette County	Development of novel drug delivery formulations for skin permeation enhancement. AllTranz is focused on the opportunity to deliver medications into and through the skin. Microneedle delivery systems can effectively delivery drugs with minimal discomfort. These devices mechanically perforate the outer skin layer and allow for transdermal delivery of active components previously considered
Ocular Transplantation, LLC Norman Radtke Jefferson County	Therapeutic to treat and prevent blindess caused by retinal degenerative diseases Ocular Transplantation was founded in December 1996 to develop proprietary tools and therapies to treat and prevent blindness caused by retinal degenerative diseases. Proof of concept studies have demonstrated successful integration of donor tissue by the host retina and restoration of visual responses. Currently the tools and methods are being tested in a Phase II Clinical trial to determine officers in treating vision loss in patients with

to determine efficacy in treating vision loss in patients with



age related macular degeneration (AMD) and retinitis pigmentosa (RP). There is no approved therapy to restore vision in patients with the most common form of AMD. Success in this proposed research will impact several important aspects of the treatment of retinal disease, with important economic and clinical ramifications.

Sisters of Invention Sally Davisson Woodford County Car seat alerting driver of child's presence. Sisters of Invention, LLC is a group of business women executives that have the experience and expertise to use existing technology, combined with new ideas and applications to create a baby car seat alert system to save lives. Our extensive backgrounds in business management, marketing and sales will allow us the foundation to build partnerships to bring this product to market profitably. Our mission is to create and develop products, ideas and resources that will protect life and safety. Our first objective is to save infants from needless death in automobiles, and then to use the resources that are developed to protect others. Ultimately, our goal is to be first to market with this unique life saving technology and providing an excellent return on investment to our investors and partners.

US WorldMeds, LLC P. Breckininridge Jones Jefferson County Lofexidine would be the first non-addictive, non-narcotic treatment approved to relieve the distressing withdrawal symptoms associated with opiate detoxification." US WorldMeds has recently announced its launching of a Phase III clinical trial for Lofexidine - which, if accepted by the FDA, would be the first non-addictive, non-narcotic treatment available in the US to treat the debilitating withdrawal symptoms associated with opiate detoxification. Lofexidine has been used to detoxify more than 200,000 opiate addicts in the United Kingdom since its approval 13 years ago. Lofexidine blocks the adrenergic storm created by abrupt cessation of opiates from the body. In contrast, the current mode of treatment for most opiate addicts is methadone or buprenorphine, both of which are replacement (synthetic opiate) drugs, requiring daily administration from licensed detox centers and/or practitioners. There are an estimated 10 million opiate addicts in the US including approximately 1 million heroin addicts, with the remaining addicted to prescription opiates such as Vicodin and Oxycontin. Opiate addiction is worsening in the US as the federal government recently reported that 2.4 million new people began using opiates for non-medicinal purposes in the last year alone. Lofexidine is anticipated to be widely accepted due to being able to be prescribed by any physician and dispensed by any pharmacy anywhere in the US. Lofexidine will enable opiate addicts to safely, effectively and discreetly detoxify without



being forced into limited licensed detox centers/clinics for

treatment. ImmunoTheragnostics Incorporated Method for the early detection of ovarian cancer. Andrew Steen ImmunoTheragnostics Incorporated is developing innovative Jefferson County products for women's health. Currently the company is focused on the development of serum-based diagnostic tests—including tests for women specific cancers and nonmalignant conditions, such as infertility and pregnancy complications. ImmunoTheragnostics' lead diagnostic program is in ovarian cancer. Ovarian cancer is the 4th leading cause of cancer-related deaths in women. From a patient serum sample, the company's test will be able to: identify the presence of ovarian cancer, provide information on the stage of disease and allow optimization of treatment regimens. Life Gear LLC Portable blanket warmer. COMFORT ZONE tm is a portable Casey Jenkins blanket warming system. COMFORT ZONE tm gives Hardin County immediate warm blanket comfort in time of emergency or need. TRT Homeland Security, LLC John Finney Johnson County AllTranz Inc. Transdermal Delivery of Cannabidiol AllTranz is focused on Audra Stinchcomb the opportunity to deliver medications through transdermal drug delivery systems. . The product is intended to target pain Fayette County relief, including nerve-related pain, as well as chronic debilitating muscle spasms, and may impact other conditions like strokes and alcoholism. University of Louisville The affect of antibiotic cycling on the development of **Beth Bradley** antibiotic resistance among bacteria in intensive care Jefferson County units University of Kentucky **Development of High-throughput Screens for Discovery** Guzngxiang (George) Luo Fayette County of Novel Inhibitors against Hepatitis C Virus University of Kentucky David Puleo Intermittent Release Device for Bone Regeneration Fayette County Application of new bone regeneration technologies for repairing bone defects through timed-release of factors that lead to growth of bone having quality microarchitecture.



<u>University of Louisville</u> Mehmed Kantardzic <u>Jefferson County</u>	Human Health and Development
University of Kentucky Thomas Tobin Fayette County	Novel Therapeutic Approaches to Treatment of Parasitic Disease and Related Clinical Conditions. Newly identified concepts in veterinary medicine suggest equivalent new approaches in human medicine. This proposal outlines how we will establish and commercialize these newly identified therapeutic principles and approaches in important areas of human medicine, including mental illness.
University of Kentucky Robert Yokel Fayette County	Develop an in-line filter to remove Al from intravenous feeding solutions given to premature infants Potentially hazardous concentrations of aluminum are present as a contaminant in solutions used for intravenous feeding (total parenteral nutrition) of premature infants. We are developing a flow-through filter device containing a chemical that will bind the aluminum as the solution flows through the filter.
University of Louisville William Ehringer Jefferson County	A New Energy Delivery Vehicle to Combat Ischemia
University of Louisville M. Michele Pisano Jefferson County	Molecular Analyses of Cranial Embryonic Stem Cells A baby is born with a craniofacial defect every five minutes, yet little is known regarding the precise molecular and cellular potential of the cranial neural crest — a population of embryonic stem cells that makes essential contributions to development of the craniofacial region. The present study will employ a unique molecular genetic strategy to label and isolate cranial neural crest cells from mammalian embryos during development of the craniofacial region, and establish a series of "molecular fingerprints" of these cells through the use of microarray-based comprehensive gene expression profiling. Such studies offer the promise of expanding our understanding of the molecular complexities of these embryonic progenitor cells and revealing the etiology of various craniofacial birth defects.
University of Louisville Edward Essock Jefferson County	Improving Glaucoma Treatment Based on Wavelet-Fourier Analysis of Retinal Nerve Fiber Layer Thickness This research develops new methods of analysis of the neurons in the back of a person's eye to assess the

propensity to develop glaucoma. The new analysis methods will allow for the preservation of more sight than is now presently possible by allowing glaucoma treatment to be



	begun at an earlier point in the course of the disease.
University of Louisville Theresa Chen Jefferson County	Glutathione Intervention in Diabetes Mellitus The purpose of this study is to test the hypothesis that enhancing tissue glutathione levels will have a benefical effect on the metabolic problems associated with diabetes.
University of Kentucky Peter Hardy Fayette County	Evaluating the severity of spinal cord injury with manganese-enhanced magnetic resonance imaging This project will explore magnetic resonance imaging enhanced with manganese as a contrast agent to visualize changes occurring in the recovery of the spinal cord in spinal cord injured rats. The technique would likely be useful in differentiating the effects of therapeutic approaches to diminishing the extent or severity of the secondary injury or recovery following rehabilitation strategies.
University of Louisville J.Christopher States Jefferson County	Molecular mechanisms of arsenic enhancement of benzo[a]pyrene genotoxcity in human cells Arsenic is a natural contaminant of drinking water in many areas of the U.S., is present in tobacco, and causes cancer in humans. Eastern Kentuckians, in particular, are at risk to arsenic overexposure due to a high number of smokers living in areas with arsenic contaminated drinking water. This project will examine the potential for arsenic exposure to increase the cancer causing effects of a tobacco smoke chemical.
University of Louisville Barbara Burns Jefferson County	An Examination of Temperament and Attention in Children Attending Head Start
University of Louisville Craig McClain Jefferson County	Novel Therapeutic Intervention for Non-Alcoholic Steatohepatitis
University of Louisville Steven Koenig Jefferson County	Good Laboratory Practice (GLP) Compliant Data Acquisition and Analysis Development of data acquisition and analysis software that is compliant with Good Laboratory Practice (GLP) regulations as required for Food and Drug Administration approval of pre-clinical laboratory studies of medical devices and therapies.
<u>University of Louisville</u> K. Grant Taylor <u>Jefferson County</u>	Combinatorial Drug Discovery Through Constrained Macrocyclic Libraries
University of Kentucky	Optimization of Drill Design and Coolant Delivery



Mark Thomas Fayette County	Systems for Dental Implant Surgery
University of Kentucky Maria Boosalis Fayette County	Development of A Nutrition Education CD On Healthy Eating to Combat Overweight and Obesity in Kentucky: "Be the Best You Can Be: Healthy Eating for Life" Development of a nutrition education CD for grade school students on "Healthy Eating for Life" to combat childhood overweight and future obesity, improve child nutrition, and exist in alignment with core curriculum requirements for Kentucky schools.
<u>University of Louisville</u> Wenke Feng <u>Jefferson County</u>	Proteomic Analysis of Metallothionein Regulation of Zinc Homeostasis An investigation into the detection of zinc-binding proteins and zinc release from the protein metallothionein corresponding to oxidative stress in the heart.
University of Kentucky Royce Mohan Fayette County	A Novel Natural Product Inhibitor of Inflammatory Angiogenesis This study investigates a class of anti- inflammatory natural products that potently blunt the growth and expansion of pathogenic blood vessels. The development of new drug leads based on the novel pharmacological mechanisms of these inhibitors has potential wide application for the treatment of many common diseases like arthritis, cancers and bleeding eye disorders.
University of Louisville Theresa Chen Jefferson County	Nutritional Modulation of Glutathione Status and Longevity
University of Louisville William Pierce Jefferson County	Bone Targeting of Pharmaceuticals A significant need in the field of bone metabolism and osteoporosis treatment is the development of anabolic agents which increase bone mass. This project will adapt drugs already used to treat elevated cholesterol levels to additionally increase bone mass and bone strength to prevent the debilitating effects of osteoporosis.
Immpheron Inc Heinz Kohler <i>Fayette County</i>	Testing of an Antibody Drug Against Atherosclerosis Immpheron develops a novel drug to treat Atheroscerotic Plaque Disease
University of Kentucky Eugene Bruce Fayette County	Novel Analyses of Human Electroencephalograms for Detection of Brain Injury Sleep apnea, which may cause deficits in cognitive brain function due to low oxygen levels, is associated with health problems that are common in Kentucky such as obesity, smoking, hypertension, and alcohol use. In order to detect evolving deficits in brain function at an early



stage, this project will develop novel methods for analysis of brain electrical activity that are more sensitive to abnormal

<u>University of Kentucky Medical Center, Markey Cancer Center</u>
Gary Van Zant Fayette County

Manipulation of adult stem cells to improve human aging patterns This project investigates the effects of aging on adult stem cells of the blood-forming system. Our long-term goal is to promote better quality of life during the aging process.

activity than currently available methods.

<u>University of Louisville</u> Wenke Feng <u>Jefferson County</u> Molecular mechanisms of copper regulation of hypoxiainducible factor 1 The proposed project would provide crucial insights into the relationship between an essential nutrient copper and a master transcriptional regulator hypoxiainducible factor 1. This may lead to preventive and therapeutic strategies for cardiovascular diseases and cancer.

<u>University of Kentucky</u> Joseph Holtman, Jr. *Fayette County* S(-)-Norketamine-Morphine Combination Drug for Treatment of Chronic Pain The treatment of pain is a critical health issue affecting tens of millions of people annually in the US. New therapeutic agents for pain, especially for chronic pain (cancer-related and nonmalignant) would result in significant societal benefit. This research project focuses on the development of a novel analgesic agent for pain management.

<u>University of Louisville School of Medicine</u> Douglas D. Taylor *Jefferson County* Development of specific protein microarrays for early cancer diagnosis Mutations associated with the development of ovarian cancer generate antibody responses in patients. Using the patient's antibodies against their own tumor, we are developing an early diagnostic microarray for ovarian cancer.

<u>University of Kentucky</u> Michal Toborek <u>Fayette County</u> **Cell-specific drug delivery into the brain** Dr. Toborek's project is focused on improving drug delivery into the brain for better treatment of various brain diseases.

<u>University of Louisville, Birth Defects Center</u> Dashzeveg Bayarsaihan <u>Jefferson County</u> The Role of TFII-I in Embryonic Stem Cell Self-Renewal and Lineage Formation Self-renewal and pluripotency are the defining characteristics of embryonic stem cells (ESCs). However, the signaling pathways involved in stem cell renewal and the potential to form many cell types are poorly understood. The objective of Dr. Bayarsaihan's research is to determine the molecular and genetic role of the TFII-I transcription factor in ESCs. The outcome of the proposed research will allow him to identify the TFII-I-dependent genes and signaling pathways involved in self-renewal and pluripotency of ESCs. Furthermore, these studies will define fundamental mechanisms of early embryonic development



	and generate knowledge in the area of regenerative medicine.
<u>University of Kentucky</u> Jun Zhang <u>Fayette County</u>	Generalized Diffusion Simulation-Based Tractography for Mapping Human Brain
<u>University of Kentucky</u> Fuhua (Frank) Cheng <u>Fayette County</u>	
Spire Group LLC, dba microPersonal Interfaces Anthony Werle <u>Jefferson County</u>	Articulation and Repetitive Motion in Information Appliance Interfacing
Neuronetrix, Inc. Dennis Molfese <u>Jefferson County</u>	A Neuronet Detection System for Diagnosing Dyslexia and Learning Disabilities in Infants
Omnitek Inc. Robert Ein Fayette County	Advanced Lower Limb Lengthening Device - AL3D
Advertek Lee Hagendoorn <u>Jefferson County</u>	Feasibility Assessment of GLP Compliant Data Acquisition and Analysis Software System
Regenerex, LLC Suzanne Ildstad <u>Jefferson County</u>	Pancreatic Islet Tissue Committed Stem Cells for Islet Regeneration
Gersony Medical Media, Inc. DBA Medmovie.com Richard Gersony Fayette County	A Web-Based Education Solution for Health Care Providers Designed to Improve Patient and Public Health Literacy About Common Forms of Cancer and Their Treatments
Paratechs Corp. Angelika Fath-Goodin Clark County	Development and Improvement of Methods for the Expression, Solubilization, and Purification of Miligram Quantities of Regulatory, Cellular, and Membrane Associated Proteins
Regenasight LLC J Kevin McCurren Jefferson County	Develop a purified recombinant Dispase (RecDispase).
Omnitek Inc. Robert Ein <i>Fayette County</i>	Wearable Multi-Functional Therapeutic Device
AllTranz Audra Stinchcomb <i>Fayette County</i>	Transdermal Delivery of Cannabidiol
Omnitek Inc. Robert Ein <i>Fayette County</i>	Specialized Seat/Backrest for Wheelchairs



Oraceuticals, Inc. Brad Huang Fayette County	Natural Products as Anti-inflammatory to Treat Oral Infections
SureGene, LLC Mark Brennan <u>Jefferson County</u>	Sult4A1 Gene Polymorphisms as Biomarkers of Schizophrenia
Intranasal Technology, Inc. Daniel Wermeling <u>Fayette County</u>	Naltrexone Nasal Spray Decreases Ethanol Consumption in Alcoholics
Omnitek Inc. Robert Ein <i>Fayette County</i>	Smart Adaptive Power Source
Neuronetrix John Barker <i>Jefferson County</i>	Neonatal Dyslexia Screening Device for Clinical Use
SEQUELA Stephen Carrithers Oldham County	Identifying Biomarkers to Diagnose Congestive Heart Failure
Oraceuticals, Inc. Brad Huang Fayette County	KY Natural Products: Inhibitors of Proteases of Oral Pathogens
Alkymos Robert Yokel <i>Fayette County</i>	Development of a Device Containing Immobilized Chelator to Remove Aluminum from Total Parenteral Nutrition Solutions
Allylix Inc Bryan Greenhagen <i>Fayette County</i>	Microbial Synthesis of Drimane Sesquiterpenoids
Laverne Douglas Technologies LLC Michael Spears <u>Jessamine County</u>	A Novel Multifunctional Medical Cutting Device
IP Pharmaceuticals Shanghong Wang Fayette County	New Technologies for Liver Disease
Intranasal Therapeutics, Inc. Daniel Wermeling Fayette County	Nasal Delivery of Ondansetron for the Treatment of Alcoholism
ALT Bioscience Angie Chapman <i>Fayette County</i>	Glutamine Synthetase in the Detection of Alzheimer's Disease and Other Neurodegenerative Diseases
Pharmacogenetics Diagnostic Lab, LLC Diana Maslowski <i>Jefferson County</i>	Refinement and Development of a Personalized Medicine Management Tool for the Safe and Effective Treatment of Patients Undergoing Warfarin Therapy



3Gen Scientific Donald Skaggs <i>Fayette County</i>	Cryostat Disinfecting and Decontaminating Process Using Mobile, Pulsed Ultraviolet Light System
Morehead State University Bruce Mattingly Rowan County	Clinical Psychologist
University of Louisville Stephen Winters Jefferson County	Collaborations in Pursuit of a Center for the Study of Neuroendocrine and Testicular Mechanisms in Male Infertility
Western Kentucky University Cheryl Davis Warren County	Neuroscientist
University of Louisville Yousef Kwaik Jefferson County	Interdisciplanary Studies in Biodefense and Emerging Infectious Diseases
<u>University of Kentucky</u> Kimberly Anderson <u>Fayette County</u>	Whole Cell Immobilization Using SCF Technology as Cell-Based Biosensors
University of Kentucky Leonidas Bachas Fayette County	Monitoring & Assessment of Human Health During Space Flight Deconditioning-A
University of Kentucky Charles Knapp Fayette County	Monitoring & Assessment of Human Health During Space Flight Deconditioning-B
Western Kentucky University Wieb VanderMeer Warren County	Monitoring & Assessment of Human Health During Space Flight Deconditioning-C
<u>University of Kentucky</u> Kimberly Anderson <u>Fayette County</u>	Miniaturized Multicellular-Based Biosensors for Detecting Toxins
University of Kentucky Leonidas Bachas Fayette County	Integrated Biomarker Diagnostic Systems for Monitoring Monitoring Astronaut Health
University of Kentucky Charles Knapp Fayette County	Artificial Gravity Training with NASA Ames Short Radius Centrifuge to Improve Orthostatic Tolerance in Women as a Countermeasure to Space Flight Deconditioning
University of Kentucky Charles Knapp Fayette County	Application of New Instrumentation for Studying Artificial Gravity Training using the NASA Ames Short Radius Centrifuge



<u>University of Kentucky</u> Kimberly Anderson <u>Fayette County</u>	KSGC Fellowship for Morgan Abney: Biocompatible and Miniaturized > Sensor Arrays
<u>University of Louisville</u> Edward Essock <u>Jefferson County</u>	Visual Perception of Oriented Structure
University of Louisville Edward Essock Jefferson County	Contrast Gain Control in Early Visual Processing
<u>University of Kentucky</u> Kimberly Anderson <i>Fayette County</i>	Biocompatible and Miniaturized Sensor Arrays for Physiological Monitoring During Long-Term Space Flights
<u>University of Kentucky</u> Joyce Evans <u>Fayette County</u>	Gender Differences in Response to Simulated Microgravity with and without Countermeasrue
University of Louisville Edward Essock Jefferson County	Anisotropic Gain Control in Human Contrast Perception
Eastern Kentucky University Catherine Clement Madison County	Analogies and Learning to See: The Development of Attentional Strategies and Eye Movement Patterns
Morehead State University Shari Kidwell Rowan County	Parent-Child Attachment in Appalachia
Murray State University Mark Masthay Calloway County	Mechanistic Studies of the Laser- and UV-Induced Photoreduction of the Chromophore in Bacteriorh
University of Louisville Eric Wong Jefferson County	NA - (SUM Program: 1 Student)
Morehead State University Katy Carlson Rowan County	The Perception of Focus
Western Kentucky University Ralph Salvatore Warren County	Facile C-C Bond Formation Using New Frontier Organobarium Reagents and Applications Toward the Synthesis of Dopal: A Potential Target for Neurprotective Therapy in Parkinson's Disease
Bellarmine University Mary Huff Jefferson County	Effect of Cigarette Constituents on Cell Proliferation in Normal and Neoplastic Lung Tissue
Eastern Kentucky University	Songbirds, Mosquitoes, and the West Nile Virus:



Cabinet for Economic Development

Gary Ritchison <u>Madison County</u>	Interactions and the Impacts of an Exotic Pathogen on the Condition, Behavior, and Reproductive Success of Two Host Species
Western Kentucky University John All Warren County	Evaluation of Interannual Climate Variability Impacts on Land Cover and Land Use in Central Chile: Agricultural Responses to ENSO Driven Climate Variability
Morehead State University Cary Feria Rowan County	Spatial Distribution of Visual Attention Within Moving Objects
Western Kentucky University Kevin Williams Warren County	Ruthenium Complexes are Protein Cleavage Agents
Western Kentucky University Martin Bink Warren County	Understanding Innovation Processes: Creativity, Learning, and Collaboration
Eastern Kentucky University Eric Dueno Madison County	Synthesis of Cavitand Metal Complexes
University of Kentucky Bruce O'Hara Fayette County	Identification of Genes that Influence Sleep and Wake using a Novel, High-Thoroughput, Piezoelectric Technology
University of Louisville Robert Greene Jefferson County	Molecular Determinants of Developmental Defects
University of Kentucky Louis Hersh Fayette County	Center for Biomedical Excellence in the Molecular Basis for Human Disease
University of Kentucky Jeffrey Ebersole Fayette County	Center of Biomedical Research Excellence in Oral Health Research
University of Kentucky Mfirstinitial Swanson Fayette County	Local Food Systems And Agricultural Diversification: Opportunities And Obstacles

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